

Dr. Duke's Phytochemical and Ethnobotanical Database

Chemicals Found in *Laurus nobilis*

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
30	(+)-CATECHIN	Leaf	--	--		
7	(+)-GALLOCATECHIN	Leaf	--	--		
38	(-)-EPICATECHIN	Leaf	--	--		
21	(-)-EPIGALLOCATECHIN	Leaf	--	--		
67	1,8-CINEOLE	Leaf	375	15000	2.6596919560245604	
67	1,8-CINEOLE	Leaf Essent. Oil	211400	620000	1.287251771450938	
67	1,8-CINEOLE	Fruit Essent. Oil	228000	283700	-0.8958928253130353	
67	1,8-CINEOLE	Essential Oil	--	--		
8	4-TERPINEOL	Leaf Essent. Oil	--	--		
16	ACETIC-ACID	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
3	ACETONE	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
5	ACETYL-EUGENOL	Leaf Essent. Oil	--	--		
2	ACTINODAPHNINE	Bark	--	100		
2	ACTINODAPHNINE	Wood	--	--		
2	ACTINODAPHNINE	Stem Bark	--	--		
11	ALPHA-PHELLANDRENE	Leaf	10	120	-0.22922005050208058	
11	ALPHA-PHELLANDRENE	Leaf Essent. Oil	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
11	ALPHA-PHELLANDRENE	Fruit Essent. Oil	--	100700	1.1856174256264056	
28	ALPHA-PINENE	Leaf	--	125	-0.21642895495470849	
28	ALPHA-PINENE	Leaf Essent. Oil	1300	76600	-0.3317578595752018	
28	ALPHA-PINENE	Fruit Essent. Oil	--	93000	0.38198728895825224	
28	ALPHA-PINENE	Flower	--	--	-0.8461946767360643	
28	ALPHA-PINENE	Bark	--	27	-1	
28	ALPHA-PINENE	Wood	--	--		
3	ALPHA-SELINENE	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
13	ALPHA-TERPINENE	Leaf	14	300	-0.1573418694572951	
13	ALPHA-TERPINENE	Leaf Essent. Oil	--	--		
23	ALPHA-TERPINEOL	Leaf	140	1380	1.8321956980210965	
23	ALPHA-TERPINEOL	Leaf Essent. Oil	4000	92700	1.0083241708956292	
23	ALPHA-TERPINEOL	Fruit Essent. Oil	--	58500	1.7711701171427547	
4	ARTECANIN	Leaf	--	--		
1	ARTEMORIN	Leaf	140	5000		
7	ASTRAGALIN	Leaf	--	--		
24	BENZALDEHYDE	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
6	BETA-BISABOLENE	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
5	BETA-ELEMENE	Plant	--	--		
5	BETA-ELEMENE	Leaf Essent. Oil	--	--		
13	BETA-EUDES MOL	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
13	BETA-EUDES MOL	Leaf Essent. Oil	--	--		
2	BETA-MYRCENE	Leaf Essent. Oil	--	--		
3	BETA-PHELLANDRENE	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
13	BETA-PINENE	Leaf	130	2080	2.63885283535404	
13	BETA-PINENE	Leaf Essent. Oil	1600	54000	1.5747827512922534	
3	BETA-SELINENE	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
47	BETA-SITOSTEROL	Leaf	--	1450	-0.2944657138376137	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
29	BOLDINE	Leaf	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
35	BORNEOL	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
35	BORNEOL	Leaf Essent. Oil	--	4700	-0.6211151011481656	
12	BORNYL-ACETATE	Plant	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	BORON	Leaf	9	16	-1.2328645872256474	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
6	BUTYRIC-ACID	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
102	CAFFEIC-ACID	Fruit	--	--		
102	CAFFEIC-ACID	Leaf	--	--		
2	CAMPESTEROL	Leaf	--	60	-0.5558506974492348	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
9	CAMPHENE	Leaf	24	186	-0.1223873321341401	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
9	CAMPHENE	Leaf Essent. Oil	--	7000	-0.6281133210860443	
41	CAMPHOR	Plant	--	--		
41	CAMPHOR	Leaf Essent. Oil	--	--		
1	CAPROIC-ACID	Plant	--	--		
1	CAPROIC-ACID	Leaf	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
5	CAPRYLIC-ACID	Plant	--	--		
37	CARVACROL	Leaf Essent. Oil	--	--		
19	CARVONE	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
31	CARYOPHYLLENE	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
8	CARYOPHYLLENE-OXIDE	Plant	--	--		
1	CATECHINS	Leaf	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
18	CINNAMIC-ACID	Fruit	--	--		
18	CINNAMIC-ACID	Leaf	--	--		
18	CINNAMIC-ACID	Fruit Essent. Oil	--	90000		
3	CINNAMYL-ACETATE	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
1	CIS-3-HEXENOL	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
3	CIS-OCIMENE	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
53	CITRAL	Leaf	--	--		
53	CITRAL	Fruit Essent. Oil	--	--		
12	COPPER	Leaf	4	4	-0.6510387463181428	USDA's Ag Handbook 8 and sequelae)
9	COSTUNOLIDE	Leaf	1191	18000		
9	COSTUNOLIDE	Fruit	--	2560		
9	COSTUNOLIDE	Root	--	3100		
2	CUMAMBRIN-B	Leaf	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
7	CYANIDIN	Plant	--	--		
1	DEACETYLLAURENOBIOLIDE	Leaf	--	50		
4	DEHYDROCOSTUS-LACTONE	Leaf	--	--		
4	DEHYDROCOSTUS-LACTONE	Fruit	--	14000		
8	DELTA-3-CARENE	Leaf	15	162	2.232520909065303	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
9	DELTA-CADINENE	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
9	DELTA-CADINENE	Leaf Essent. Oil	--	--		
16	ELEMICIN	Plant	--	--		
4	EREMANTHIN	Fruit	--	14000		
12	ESTRAGOLE	Leaf Essent. Oil	--	--		
76	EUGENOL	Leaf	18	1335	-0.6593393775367795	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
76	EUGENOL	Essential Oil	--	--		
76	EUGENOL	Leaf Essent. Oil	--	10200	-1.023260533180429	
1	EUGENOL-ACETATE	Leaf Essent. Oil	--	5000	-1	
5	EUGENOL-METHYL-ETHER	Essential Oil	--	--		
5	EUGENOL-METHYL-ETHER	Leaf Essent. Oil	5000	77000	-1	
6	EUGENYL-ACETATE	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
13	FORMIC-ACID	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
11	GAMMA-TERPINENE	Leaf	35	137	0.1872301001508422	
11	GAMMA-TERPINENE	Leaf Essent. Oil	--	1700	-0.7023439508515464	
35	GERANIOL	Fruit	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
35	GERANIOL	Leaf	--	--		
35	GERANIOL	Leaf Essent. Oil	--	13000	-1.1455624970792637	
5	GERANYL-ACETATE	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
3	GUAIJAVERIN	Leaf	--	--		
5	HEXANAL	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
3	HEXANOL	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	HUMULENE	Leaf Essent. Oil	--	--		
2	ISOBUTYRIC-ACID	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
22	ISOQUERCITRIN	Leaf	--	--		
1	JUGLANIN	Leaf	--	--		
75	KAEMPFEROL	Plant	--	--		
1	LAURENOBIOLIDE	Plant	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	LAURENOBIOLIDE	Root	600	2000		
1	LAURENOBIOLIDE	Leaf	--	--		
7	LAURIC-ACID	Fruit	60000	192500	1.9272892561696446	
1	LEUCOCYANIDIN	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
60	LIMONENE	Leaf	55	500	0.07821612616499558	
60	LIMONENE	Leaf Essent. Oil	--	--		
53	LINALOOL	Leaf	20	3340	1.6654663919658252	
53	LINALOOL	Essential Oil	--	--		
53	LINALOOL	Leaf Essent. Oil	4000	183700	0.46735098325491625	
27	LINOLEIC-ACID	Plant	--	--		
27	LINOLEIC-ACID	Fruit	36000	176000	2.127693140200353	
14	MANGANESE	Leaf	82	82	-0.3235642905289543	USDA's Ag Handbook 8 and sequelae)
18	MANNITOL	Root	--	6422	-1.3246166156133767	
2	METHANOL	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
5	METHYL-CINNAMATE	Fruit	--	--		
20	METHYL-EUGENOL	Leaf	20	2608	-0.4181165295687271	
22	MYRCENE	Leaf	5	320	-0.0572027272100166	
22	MYRCENE	Leaf Essent. Oil	--	46800	-0.1845827373674177	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
5	MYRTENAL	Leaf	18	90	1.2943376979698786	
2	MYRTENOL	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
4	NERAL	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
10	NEROL	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
5	NERYL-ACETATE	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
18	OLEIC-ACID	Plant	--	--		
18	OLEIC-ACID	Fruit	66000	220000	1.2148685350373452	
25	P-COUMARIC-ACID	Fruit	--	20	-0.6771858047250778	
25	P-COUMARIC-ACID	Leaf	--	192	-0.2995654865435739	
16	P-CYMENE	Leaf	62	340	0.04851679017072622	
16	P-CYMENE	Leaf Essent. Oil	--	198300	2.1686417177504986	
13	PALMITIC-ACID	Fruit	20000	60500	0.5763214413284119	
27	PARTHENOLIDE	Leaf	--	--		
14	PERILLYL-ALCOHOL	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	PHENYLHYDRAZINE	Leaf	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	PHYTOSTEROLS	Seed	--	1510	-0.23598595676506973	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
1	PINOCARVONE	Leaf	35	170	1.5478706392651775	Tucker, et al, EB46(1):21-24.1992
10	PIPERIDINE	Leaf	--	--		
34	PROANTHOCYANIDINS	Leaf	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
1	PROCYANIDIN-B-2	Leaf	--	--		
4	PROCYANIDIN-B-4	Leaf	--	--		
6	PROPIONIC-ACID	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
176	QUERCETIN	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
44	QUERCITRIN	Leaf	--	--		
10	RETICULINE	Leaf	--	--		
1	REYNOSIN	Leaf	67	2500		
87	RUTIN	Leaf	--	--		
5	SABINENE	Leaf	25	2650	1.4272110708644	
5	SABINENE	Leaf Essent. Oil	42000	82900	0.7545516886727462	
7	SALICYLATES	Leaf	10	25	-0.5226078387767185	
5	SANTAMARIN	Leaf	--	73		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
3	SANTAMARINE	Leaf	44	1500		
23	TERPINEN-4-OL	Leaf	190	1380	0.44764477349717596	
23	TERPINEN-4-OL	Leaf Essent. Oil	7800	22000	-0.3624984026500584	
23	TERPINEN-4-OL	Essential Oil	--	--		
18	TERPINEOL	Fruit Essent. Oil	--	109000	1	
9	TERPINOLENE	Leaf	4	200	0.022680174029978174	
5	TERPINYL-ACETATE	Essential Oil	--	--		
71	THYMOL	Leaf Essent. Oil	--	--		
1	TOLUENE	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
4	TRANS-2-HEXENAL	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
1	TRANS-CARVEOL	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	TRANS-PINOCARVEOL	Leaf Essent. Oil	--	--		
2	TULIPINOLIDE	Root	--	--		
2	TULIPINOLIDE	Leaf	--	--		
1	VALERIANIC-ACID	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	VERLATORIN	Leaf	90	1400		

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1	VIRIDIFLOROL	Leaf	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	VISCIDULIN-C	Leaf	--	--		